

SN 09/848,823  
Docket No S-94,613  
In Response to Office Action dated October 16, 2003

### REMARKS

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al. (JP 8-203537) in view of Bellows et al. (U.S. Patent 5,955,214). The rejection states that Uchida et al. teach a fuel cell with anode backing having a second surface with a CO oxidation catalyst layer thereon, as claimed by applicants, and Bellows et al. teach CO oxidation catalysts for removing CO from a hydrogen-rich gas stream, where the catalyst may consist of mixed oxides of Sn and Cu or an  $\text{SnO}_2\text{-CuO}$  gel.

Applicants have amended Claim 1 to more clearly recite that applicants' catalyst layer consists essentially of a single catalyst selected from the claimed list of catalysts. Bellows et al. contemplate only the use of mixed catalysts, as shown at Col. 3, lines 46-55.

Solid scavengers for use in the present invention include mixed oxides of manganese and copper and such mixed oxides in combination with oxides of silver, nickel, iron, chromium,  $\text{SnO}_2\text{-CuO}$  gels and tin; and mixtures thereof. One example of a suitable scavenger is hopcalite (U.S. Pat. No. 1,345,323). Solid scavengers from mixed oxides of tin and copper such as  $\text{SnO}_2\text{-CuO}$  gels are also suitable for use as scavenger materials.

The oxide mixtures taught by Bellows et al. are not arranged on an anode backing, as taught by Uchida et al., but are provided in a separate carbon monoxide removal apparatus or separator 20 (Col. 2, lines 40-41).

Applicants have found that only a single one of the non-precious metal catalysts recited in Claim 1 is required for effective CO oxidation when the catalyst is arranged in the manner taught by Uchida et al. and claimed by applicants. Applicants respectfully assert that neither Uchida et al. nor Bellows et al., either alone or in combination, suggest that the use of a single non-precious metal catalyst arranged on a second side of an anode backing for CO oxidation may form an effective CO oxidation catalyst. At best, the combination of Uchida et al. and Bellows et al. might provide a suggestion to try single ones of the catalysts, but that is not an appropriate basis for an obviousness rejection.

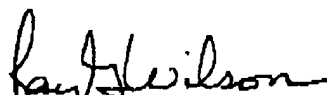
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Claim 1, as now amended, is in condition for allowance. Claims 2-4 depend from Claim 1 and are allowable thereunder. The Examiner is requested to allow amended Claims 1-4 and to pass this case to issue.

Applicants' attorney would be pleased to discuss any of the issues in this case if the Examiner concludes such a discussion would assist in placing the case in condition for allowance.

Respectfully submitted,

Date: Dec. 11, 2003

  
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Signature of Attorney

Reg. No. 28,351  
Phone (505) 665-3112

Ray G. Wilson  
Los Alamos National Laboratory  
LC/IP, MS A187  
Los Alamos, New Mexico 87545